

Claims:

For the convenience of the Examiner, all pending claims of the present Application are shown below.

1. (Currently Amended) A system for wireless communication within a retail refueling environment, comprising:

an in-store controller at a retail refueling facility adapted to process at least one message relating to a retail refueling environment;

an in-store controller communication module at the retail refueling facility, connected to the in-store controller, comprising at least one of a wireless transmitter and a wireless receiver and operable to receive and wirelessly transmit the at least one message to at least one client module;

the at least one client module at the retail refueling facility comprising at least one of a wireless transmitter and a wireless receiver and operable to interface the in-store controller with at least one service device, wherein the at least one service device is operable to provide services to the retail refueling environment in response to the at least one message; and

at least one service device, connected to the at least one client module by a first wireless link, the at least one service device adapted to receive and process the at least one message; and

a second wireless communication link within the retail refueling facility adapted to communicate the at least one message between the at least one of a wireless transmitter and a wireless receiver in the communication module and the at least one of a wireless transmitter and a wireless receiver in the at least one client module.

2. (Previously Presented) The system of claim 1, wherein the processing by the in-store controller comprises generating the at least one message.

3. (Previously Presented) The system of claim 1, wherein the processing by the in-store controller comprises extracting the at least one message.
4. (Previously Presented) The system of claim 1, further comprising a serial interface adapted to connect the in-store controller to the communication module.
5. (Previously Presented) The system of claim 1, further comprising a serial interface adapted to connect each of the at least one client module to a corresponding one of the at least one service device.
6. (Original) The system of claim 1, wherein the wireless communication link comprises a spread spectrum communication link.
7. (Original) The system of claim 1, wherein the at least one service device comprises a tank gauge monitor.
8. (Original) The system of claim 7, wherein the at least one message comprises refueling tank level information.
9. (Original) The system of claim 1, wherein the at least one service device comprises a leak detection system.
10. (Original) The system of claim 9, wherein the at least one message comprises leak detection information.
11. (Original) The system of claim 1, wherein the at least one message comprises customer transaction information.

12. (Original) The system of claim 1, wherein the at least one message is formatted according to a protocol link layer for transmission of at least one data packet, the at least one data packet comprising wired connection protocol information for a retail refueling environment.

13. (Original) The system of claim 1, wherein the at least one service device comprises at least one of a car wash controller, a satellite digital interface unit, and a price board controller.

14. (Currently Amended) A system for wireless communication within a retail refueling environment, comprising:

an indoor payment terminal (IPT) at a retail refueling facility adapted to process at least one message relating to a retail refueling environment;

an IPT communication module, connected to the IPT at the retail refueling facility, comprising at least one of a wireless transmitter and a wireless receiver and operable to receive and wirelessly transmit the at least one message to at least one client module;

the at least one client module at the retail refueling facility comprising at least one of a wireless transmitter and a wireless receiver and operable to interface the IPT with at least one peripheral device, wherein the at least one peripheral device is operable to provide services to the retail refueling facility in response to the at least one message; and

~~at least one peripheral device, connected to the at least one client module by a first wireless link, the at least one peripheral device adapted to receive and process the at least one message; and~~

a second wireless communication link within the retail refueling facility adapted to communicate the at least one message between the at least one of a wireless transmitter and a wireless receiver in the communication module and the at least one of a wireless transmitter and a wireless receiver in the at least one client module.

15. (Original) The system of claim 14, wherein the at least one peripheral device comprises at least one of a customer display, a pin-pad, a journal printer, a receipt printer, a keyboard, an input mouse, a touchscreen, a barcode scanner, a cash drawer, a check approval interface, a surveillance camera, and a money order machine.

16. (Original) The system of claim 14, wherein the wireless communication link comprises a spread spectrum communication link.

17. (Currently Amended) An in-store to forecourt communication system for wireless communication within a retail refueling environment, comprising:

a point of sale (POS) network controller at a retail refueling facility adapted to process at least one message relating to a retail refueling environment;

a POS communication module at the retail refueling facility, connected to the POS network controller, comprising at least one of a wireless transmitter and a wireless receiver and operable to wirelessly transmit the at least one message to at least one client module;

the at least one client module at the retail refueling facility comprising at least one of a wireless transmitter and a wireless receiver and operable to interface the POS with at least one forecourt controller device, wherein the at least one forecourt controller device is operable to provide services to the retail refueling facility in response to the at least one message; and

~~at least one forecourt controller device, connected to the at least one client module by a first wireless link, the at least one forecourt controller device adapted to receive and process the at least one message; and~~

a second wireless communication link at the retail refueling facility adapted to communicate the at least one message between the at least one of a wireless transmitter and a receiver in the POS communication module and the at least one of a wireless transmitter and a wireless receiver in the at least one client module.

18. (Previously Presented) The in-store to forecourt communication system of claim 17, wherein the processing by the POS network controller-comprises generating the at least one message.

19. (Previously Presented) The in-store to forecourt communication system of claim 17, wherein the processing by the POS network controller comprises extracting the at least one message.

20. (Previously Presented) The in-store to forecourt communication system of claim 17, further comprising a serial interface adapted to connect the POS network controller to the communication module.

21. (Previously Presented) The in-store to forecourt communication system of claim 17, further comprising a serial interface adapted to connect each of the at least one client module to a corresponding one of the at least one forecourt controller device.

22. (Original) The in-store to forecourt communication system of claim 17, wherein the at least one message formatted according to a protocol link layer for transmission of at least one data packet, the at least one data packet comprising wired connection protocol information for a retail refueling environment.

23. (Original) The in-store to forecourt communication system of claim 17, wherein the wireless communication link comprises a spread spectrum communication link.

24. (Original) The in-store to forecourt communication system of claim 17, wherein the POS network controller comprises customer access terminal (CAT) network controller.

25. (Original) The in-store to forecourt communication system of claim 24, wherein the at least one forecourt controller device comprises a customer access terminal (CAT) controller board.

26. (Original) The in-store to forecourt communication system of claim 25, further comprising at least one user interface device communicating with the CAT controller board via a wireless interface.

27. (Original) The in-store to forecourt communication system of claim 17, wherein the POS network controller comprises a pump network controller.

28. (Original) The in-store to forecourt communication system of claim 27, wherein the at least one forecourt controller device comprises a pump computer.

29. (Original) The in-store to forecourt communication system of claim 28, further comprising at least one fuel dispensing component communicating with the pump computer via a wireless interface.

30. (Original) The in-store to forecourt communication system of claim 17, wherein the POS network controller comprises a radio frequency identification system (RFID) controller.

31. (Original) The in-store to forecourt communication system of claim 30, wherein the at least one forecourt controller device comprises a dispenser control board (DCB).

32. (Original) The in-store to forecourt communication system of claim 31, further comprising at least one customer identification device communicating with the dispenser control board via a wireless interface.

33. (Currently Amended) An intra-dispenser communication system for wireless communication within a retail refueling environment, comprising:

a dispenser controller device at a retail refueling facility adapted to process at least one message relating to a retail refueling environment;

a dispenser controller communication module at the retail refueling facility, connected to the dispenser controller device, comprising at least one of a wireless transmitter and a wireless receiver and operable to receive and wirelessly transmit the at least one message to at least one client module;

the at least one client module at the retail refueling facility comprising at least one of a wireless transmitter and a wireless receiver and operable to interface the dispenser controller device with at least one dispenser peripheral, wherein the at least one peripheral device is operable to provide services to the retail refueling facility in response to the at least one message; and

~~at least one dispenser peripheral, connected to the at least one client module by a first wireless link, the at least one dispenser peripheral adapted to receive and process the at least one message; and~~

a wireless ~~second~~ communication link at the retail refueling facility adapted to communicate the at least one message between the at least one of a wireless transmitter and a wireless receiver in the dispenser controller communication module and the at least one of a wireless transmitter and a wireless receiver in the at least one client module.

34. (Currently Amended) The intra-dispenser communication system of claim 33, further comprising a serial interface adapted to connect the dispenser controller device to the dispenser controller communication module.

35. (Previously Presented) The intra-dispenser communication system of claim 33, further comprising a serial interface adapted to connect each of the at least one client module to a corresponding one of the at least one dispenser peripheral.

36. (Original) The intra-dispenser communication system of claim 33, wherein the wireless communication link comprises a spread spectrum communication link.

37. (Original) The intra-dispenser communication system of claim 33, wherein the at least one message is formatted according to a protocol link layer for transmission of at least one data packet, the at least one data packet comprising wired connection protocol information for a retail refueling environment.

38. (Original) The intra-dispenser communication system of claim 33, wherein the dispenser controller device comprises a customer access terminal (CAT) controller board.

39. (Original) The intra-dispenser communication system of claim 38, wherein the least one dispenser peripheral comprises a user interface device.

40. (Original) The intra-dispenser communication system of claim 39, wherein the user interface device comprises at least one of a receipt printer, a customer display, a keypad, a cash acceptor, a smartcard reader, a barcode reader, and an automatic refueling robot controller.

41. (Original) The intra-dispenser communication system of claim 33, wherein the dispenser controller device comprises a pump computer.

42. (Original) The intra-dispenser communication system of claim 41, wherein the least one dispenser peripheral comprises a fuel dispensing component.

43. (Original) The intra-dispenser communication system of claim 42, wherein the fuel dispensing component comprises at least one of a price/volume display, a stop button, an

emergency stop button, a select-to-start button, a push-to-start button, a nozzle boot microswitch, a valve, a vapor recovery system, and an automatic refueling robot.

44. (Original) The intra-dispenser communication system of claim 33, wherein the dispenser controller device comprises a dispenser control board.

45. (Original) The intra-dispenser communication system of claim 44, wherein the least one dispenser peripheral comprises a customer identification device.

46. (Original) The intra-dispenser communication system of claim 45, wherein the customer identification device comprises at least one of a bezel reader, a card reader, a smartcard transceiver, a tag transceiver, a nozzle antenna reader, a handheld reader, and a vehicle on-board system.

47. (Currently Amended) A method for wireless communication within a retail refueling environment, comprising the steps of:

generating at least one message formatted according to a protocol link layer for communication of at least one data packet, the at least one data packet comprising information relating to a retail refueling environment;

transmitting the at least one message over a wireless communication link at least two wireless communication links within the retail refueling environment;

receiving the at least one message via the wireless communication link within the retail refueling environment; and

communicating the at least one message to at least one service device in a form compatible with the at least one service device, wherein the at least one service device is operable to provide services to the retail refueling environment in response to the at least one message.

~~processing the at least one message to extract the information relating to the retail refueling environment.~~

48. (Original) The method of claim 47, wherein the at least one data packet further comprises wired connection protocol information.

49. (Original) The method of claim 47, wherein the at least one message is further formatted to include a source address field identifying the address of a transmitter module that performs the step of transmitting.

50. (Original) The method of claim 47, wherein the at least one message is further formatted to include a destination address field identifying the address of a receiver module that performs the step of receiving.

51. (Original) The method of claim 47, wherein the at least one message is further formatted to include a message command field, the message command field indicating at least one of an attachment of a data packet, an acknowledgment/nonacknowledgment response, an in-range query, and an inrange response.

52. (Original) The method of claim 47, wherein the at least one message is further formatted to include at least one of a message sequence number field, and a message length field indicating a total length of the at least one message.

53. (Original) The method of claim 47, wherein the at least one message is further formatted to include at least one of a start-of-text field, an end-of-text field, and a cyclical redundancy check field.

54. (Original) The method of claim 47, wherein the at least one data packet comprises customer transaction information.

55. (Original) The method of claim 47, wherein the at least one data packet comprises pump control information.

56. (Original) The method of claim 47, wherein the at least one data packet comprises customer identification information.